

# Antibiotic Amnesty 2022



*Fergus Allerton and Ian Ramsey update us on antimicrobial resistance and the proposed 2022 Antibiotic Amnesty.*

The World Health Organization (WHO) has declared that antimicrobial resistance (AMR) is one of the top 10 global public health threats facing humanity.<sup>1</sup> As frequently reported in *Companion*, the veterinary profession is actively engaged in promoting prudent antimicrobial use and, for example, has developed resources including the BSAVA/SAMSoc PROTECT ME poster to raise awareness. This, and similar international initiatives, support vets to improve their prescribing choices. The overarching aims are to avoid unnecessary antibiotic use and to ensure that when they are used, they are used appropriately. This way we will preserve antimicrobial efficacy for the future and avoid the serious impact on human and animal health caused by multi-drug resistant infections.<sup>2</sup>

## Leftover antibiotics

A recent study found that 14% of human patients failed to complete the prescribed antibiotic course.<sup>3</sup> Equivalent data is not currently available for veterinary patients. A rapid (and wholly unscientific) survey of the authors' friends and family suggests that the percentage of antibiotic medications prescribed for pets that remains unused could be even higher! What happens to all this unused medication? And does it really matter?

Despite being a safe route of disposal, leftover antibiotics are apparently rarely returned to community pharmacies in the UK (reportedly only 8% of unused antibiotics are returned). More commonly (33%) patients report disposing of them via household waste or down toilets and sinks.<sup>4</sup> Such incorrect disposal can contribute to significant environmental contamination; traces of antibiotics have been detected in rivers throughout the UK and in all four inhabited continents of the world.<sup>5</sup> The recent Beach-Bum Survey<sup>6</sup> found that surfers were three times more likely to be carrying an antibiotic resistant *E. coli* in their gut than non-surfers. Throwing antibiotics away via wastewater risks aggravating this issue.

“ There is increasing concern about the presence of antibiotics and other medicines in rivers and seas both in the UK and worldwide. ”



The BSAVA and SAMSoc 'PROTECT ME' poster promoting the responsible use of antibacterials. Available to download from the BSAVA Library ([bsavalibrary.com](https://www.bsava.com/bsavalibrary)).

Low levels of antibiotics contribute to selection pressures that favour the development of multi-drug resistant bacteria. Responsibly administering antibiotics to pets only when needed represents a key stewardship goal, but any benefit can be reduced if the unused antibiotics end up polluting the environment due to unsafe/improper disposal. While the full impact on human and animal health is yet to be understood, there is increasing concern about the presence of antibiotics and other medicines in rivers and seas both in the UK and worldwide. The United Nations Environment Programme (UNEP) identified antibiotics as being an environmental pollutant of concern back in 2017<sup>7</sup> and has called for strengthened environmental action within the One Health response to AMR in the latest UNEP report.<sup>8</sup>

A further third of people hold on to their own unused antibiotics for potential future reuse (either for themselves or friends and family). This behaviour is associated with a serious risk of adverse effects since antibiotics may be tried in inappropriate situations, can delay the administration of proper care or interact negatively with other medications that are required. Pet owners may similarly store unused antibiotics for their

pets for future reuse (due to recurrence of similar clinical signs in the same or another pet in the household). Re-using antibiotics in the same or other pets poses a greater risk of AMR spreading or emerging compared to responsible use due to under-dosing, wrong course length, inappropriate medication or inappropriate administration. The fact that veterinary antibiotics must be paid for may further exacerbate this hoarding approach.

From 2023 the RCVS Practice Standards Scheme will include provisions to encourage veterinarians to increase the return of all unused pharmaceuticals (not just antibiotics) to ensure their appropriate disposal.

## Antibiotic Amnesty

### What is an antibiotic amnesty?

An antibiotic amnesty is a campaign to encourage members of the public to return unused or unwanted antibiotics to appropriate sites for safe disposal. During the campaign, messages about the potential harms of storing unused/unwanted antibiotics in their homes, the risks of sharing them or taking them at a later date, and the harmful environmental impact of disposing of them via domestic waste or into sewage, are directed at the public and delivered by healthcare professionals and health promotion campaigns.

In November 2021 stakeholders from the NHS in the Midlands ran an antibiotic amnesty across community pharmacies in the region. Participating centres were encouraged to engage patients in conversations relating to appropriate antibiotic disposal and, where possible, to collect incomplete and unused antibiotics, recording the quantities returned. This pilot project recovered almost 500 partially or completely unused packs of antibiotics and reported nearly 8000 amnesty-related conversations with patients in a 2-week period.<sup>9</sup> Greater awareness among the general public will hopefully translate into safer disposal practices and reduced threat from AMR. It has been shown that when provided with the correct information, over 75% of members of the public disposed of their antibiotics appropriately.<sup>10</sup> Meaningful changes are achievable!

As part of a One-Health initiative, in 2022 the antibiotic amnesty will be repeated in community pharmacies in the Midlands AND veterinary practices across the United Kingdom are invited to participate too. Pet owners will be encouraged to return any unused antibiotics prescribed for their pets to their practice to ensure correct disposal. The 2022 amnesty is supported by multiple veterinary organizations including BSAVA, NOAH, VMD, BVA, RCVS, RCVS Knowledge, RUMA CAE and several veterinary corporates as well as the Royal Pharmaceutical Society, NHS Midlands and environmental organizations.



Don't forget to give clients the revised BSAVA Client Information Leaflet on Antibiotics which encourages owners to complete antibiotic courses and to return unused tablets to the practice as well as a lot of other information that vets and nurses can easily forget to tell clients.

## How to get involved in the Antibiotic Amnesty 2022

**In November 2022, overlapping with World Antibiotic Awareness Week (18–24 November), veterinary practices are invited to reach out to their client base and encourage the return of as many unused (or partially unused) packs of antibiotics as possible.**

Methods of contacting clients could include:

- Posters in waiting rooms
- Conversations in consulting rooms
- Messages on practice social media channels and websites
- Stickers on packets of tablets.

If you can work out how to contact clients who have had antibiotics dispensed in previous months to prompt them to return them if they have leftovers, then this would be welcome. Perhaps you could modify your vaccination booster reminders to include a mention of this initiative? Different things will work for different practices and the involvement of the whole team – reception, nurses, vets and other staff – is encouraged wherever possible.

Community pharmacies in the Midlands will be accepting returns of antibiotics dispensed or supplied





One of the poster resources being made available to all veterinary practices via the RUMA CAE and RCVS Knowledge websites.

for people and the veterinary practices will be accepting returns of antibiotics dispensed for animals. The amnesty will be promoted to the public, patients and pet owners via social media messages, website banners and accessible resources including posters, an animated film and factsheets. Resources are being made available to all veterinary practices and can be accessed from the RUMA CAE (<https://rumacae.org.uk/about-us>) and RCVS Knowledge (<https://knowledge.rcvs.org.uk/amr/vetteamamr>) websites.

Where possible, a dedicated collection box for the month of November could be set up in the practice and the number of returned complete and part packs of antibiotics should be recorded by each veterinary practice. This information will help gauge the success of the amnesty and will be used to inform future initiatives. BSAVA will be gathering this information by conducting a survey. Entry to the survey will enable the practice to enter a free draw for one of two practice registrations to BSAVA Congress in Manchester, a year's free Library membership for five practices, a free individual Webinar vet membership, the latest NOAH compendium or a BSAVA manual of the practice's choice (10 prizes). A parallel owner survey has been organized to seek a clearer understanding of the reasons for antibiotic hoarding (see QR code for the client survey). Please ask any interested clients (especially those returning antibiotics) to complete this very brief survey.

Given the ever-increasing demands affecting all practices, the amnesty has been designed to minimize impact on daily workflow. Working together, the veterinary community can help recover unused and unneeded antibiotics from pet owners across the country ensuring that these medications do not end up harming the environment or pets. The amnesty is an opportunity for all members of the veterinary team to raise awareness of AMR among pet owners and to help keep this critical One-Health issue at the forefront of everyone's mind. 📌



QR code for client survey

**Acknowledgements:** The One-Health amnesty of 2022 builds on the success of the 2021 version completed in community pharmacies across the Midlands under the leadership of Rakhi Aggarwal (NHS Birmingham and Solihull) and Donna Cooper (NHS Black Country). Conor Jamieson (NHS Midlands) initiated the expansion of the amnesty to encompass the return of unused veterinary antibiotics. James Russell (BVA) and Ellie West (Linnaeus) have been instrumental in launching the amnesty in the veterinary community.



Organizations involved with the Antibiotic amnesty 2022.

References and further reading are available at [www.bsavalibrary.com](http://www.bsavalibrary.com) and in *e-Companion*.